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Yu et al. (43) **Pub. Date: Feb. 2, 2017**(54) **ADAPTIVE D2D DISCOVERY OPERATIONS**(52) **U.S. Cl.**(71) Applicants: **NOKIA TECHNOLOGIES OY**,
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CA (US)CPC **H04W 8/005** (2013.01); **H04W 76/023**
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Phan, Oulu (FI)(57) **ABSTRACT**(73) Assignee: **Nokia Technologies Oy**, Espoo (FI)(21) Appl. No.: **15/303,098**(22) PCT Filed: **Apr. 11, 2014**(86) PCT No.: **PCT/IB2014/060656**

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First and second level discovery messages for device-to-device discovery are determined to be going to be transmitted, resource(s) are requested for transmission of at least the second level discovery message, and allocated resource(s) of a second type are received. The first level discovery message is transmitted on either a selected resource of the first type or a selected one of the allocated resource(s). The second level discovery message is transmitted on a selected one of the more allocated resource(s) of the second type. A first level discovery message is received on a resource of either a first type or a second type. It is determined whether the received message is of interest or not and if the message is of interest, then it is determined whether a second level discovery message is available and if so, the second level discovery message is received on a resource of the second type.

